

IN THE TITLE

Please amend the title as follows:

METHOD AND APPARATUS FOR CONTROLLING A TRANSPORT FORMAT OF  
A RETRANSMISSION INTERFERENCE LIMITATION FOR RETRANSMISSIONS

IN THE SPECIFICATION:

Please amend the specification as follows:

1. Amend paragraph [0019] of the published specification as follows:

The high level R99/4/5 architecture of Universal Mobile Telecommunication System (UMTS) is shown in Fig. 1 (see 3GPP TR 25.401: "UTRAN Overall Description", ~~available from <http://www.3gpp.org>~~, incorporated herein by reference). The network elements are functionally grouped into the Core Network (CN) 101, the UMTS Terrestrial Radio Access Network (UTRAN) 102 and the User Equipment (UE) 103. The UTRAN 102 is responsible for handling all radio-related functionality, while the CN 101 is responsible for routing calls and data connections to external networks. The interconnections of these network elements are defined by open interfaces (Iu, Uu). It should be noted that UMTS system is modular and it is therefore possible to have several network elements of the same type.

2. Amend paragraph [0022] of the published specification as follows:

Uplink enhancements for Dedicated Transport Channels (DTCH) are currently studied by the 3GPP Technical Specification Group RAN (see 3GPP TR 25.896: "Feasibility Study for Enhanced Uplink for UTRA FDD (Release 6)", ~~available at <http://www.3gpp.org>~~, incorporated herein by reference). Since the use of IP-based services become more important, there is an increasing demand to improve the coverage and throughput of the RAN as well as to reduce the delay of the uplink dedicated transport channels. Streaming, interactive and background services could benefit from this enhanced uplink.

3. Amend paragraph [0027] of the published specification as follows:

FIG. 4 shows the exemplary overall E-DCH MAC architecture on user equipment side. A new MAC functional entity, the MAC-eu 503, is added to the MAC architecture of Rel/99/4/5. The E-DCH MAC architecture includes RLC and higher layer entities 501, a MAC-d entity 502, the new functional entity MAC-eu 503, and the Physical Layer 504. The MAC-eu 503 entity is depicted in more detail in FIG. 5.

4. Amend paragraph [0031] of the published specification as follows:

Every MAC-eu entity corresponds to a user (UE). In Fig. 6 the Node B MAC-eu architecture is depicted in more detail. It can be noted that each HARQ Receiver entity is assigned certain amount or area of the soft buffer memory for combining the bits of the packets from outstanding retransmissions. Once a packet is received successfully, it is forwarded to the reordering buffer providing the in-sequence delivery to upper layer. According to the depicted implementation, the reordering buffer resides in S-RNC during soft handover (see 3GPP TSG RAN WG 1, meeting #31: "HARQ Structure", Tdoc R1-030247, ~~available of~~ <http://www.3gpp.org>, incorporated herein by reference). In Fig. 7 the S-RNC MAC-eu architecture which comprises the reordering buffer of the corresponding user (UE) is shown. The number of reordering buffers is equal to the number of data flows in the corresponding MAC-eu entity on user equipment side. Data and control information is sent from all Node Bs within Active Set to S-RNC during soft handover.

5. Amend paragraph [0039] of the published specification as follows:

In this section some frequently used terms will be briefly defined and some procedures connected to mobility management will be outlined (see 3GPP TR 21.905: "Vocabulary for 3GPP Specifications" available at <http://www.3gpp.org>, incorporated herein by reference).

6. Amend paragraph [0048] of the published specification as follows:

The principle of this scheduling approach is to allow Node B to control and restrict the transport format combination selection of the user equipment by fast TFCS restriction control. A Node B may expand/reduce the "Node B controlled subset", which user equipment can choose autonomously on suitable transport format combination from, by Layer-1 signaling. In Node B controlled rate scheduling all uplink transmissions may occur in parallel but at a rate low enough such that the noise rise threshold at the Node B is not exceeded. Hence, transmissions from different user equipments may overlap in time. With Rate scheduling a Node B can only restrict the uplink TFCS but does not have any control of the time when UEs are transmitting data on the E-DCH. Due to Node B being unaware of the number of UEs transmitting at the same time no precise control of the uplink noise rise in the cell may be possible (see 3GPP TR 25.896: "Feasibility study for Enhanced Uplink for UTRA FDD (Release 6)", version 1.0.0, available at <http://www.3gpp.org>, incorporated herein by reference).

7. Amend paragraph [0068] of the published specification as follows:

A retransmission protocol with asynchronous HARQ feedback information uses sequence numbers (SN) or other explicit identification of the feedback messages whereas

protocols with synchronous HARQ feedback information identifies the feedback messages based on the time when they are received, as for example in HSDPA. Feedback may be sent on the HS-DPCCH after a certain time instant upon having received the HS-DSCH (see 3GPP TR 25.848: "Physical Layer Aspects of High Speed Downlink Packet Access", version 5.0.0, available at <http://www.3gpp.org>, incorporated herein by reference).